

MEMORANDUM

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DATE: June 11, 2015

SUBJECT: Operational Position Statement for June 9 – June 15, 2015

The U.S. Army Corps of Engineers (USACE) is responsible for managing Lake Okeechobee water levels and makes operational decisions about whether to retain water or release water based on their regulation schedule release guidance (2008 LORS). The USACE makes this decision taking into account the best available science and data provided by its staff and a variety of partners, which includes the South Florida Water Management District (SFWMD).

The SFWMD team has discussed the system wide environmental conditions, the water supply conditions, and has evaluated the overall status of the water management system. Detailed reports are available at the SFWMD Operational Planning internet page.

This Position Statement is for the period from June 9 – June 15, 2015. The SFWMD recommendation this week is for zero releases from Lake Okeechobee at S-77, consistent with the Lake Okeechobee Adaptive Protocols (AP) release guidance. The Lake stage is within the Beneficial Use Sub-band and the 2008 LORS does not apply. The SFWMD governing board directed staff to use the SFWMD's Lake Okeechobee Adaptive Protocols (AP) release guidance as the basis for S-77 release recommendations to the USACE when the lake stage is within or below the Base Flow sub-band. For the period of June 9 – 15, the AP guidance suggests no lake releases to the Caloosahatchee Estuary via S-77 because current and forecast salinity are below the 5 practical salinity units (psu) threshold defined by the AP guidance. Specifically, the 30-day average salinity is forecasted not to exceed the 5 psu criterion at the Val-I75 site within the next two weeks.

The most recent Climate Prediction Center (CPC) outlook for Central and South Florida indicates slightly increased chances of above-normal precipitation for the month of June. The three-month window June to August depicts a similar forecast for the northern half of the District, with the southern half showing equal chances (EC) of below, normal and above-normal. The reminder of the wet season outlook is for equal chance of above, normal and below-normal. This indicates that if above average rainfall occurs it will likely be limited to the June time period. June 2015 SFWMD rainfall is so far below average for all basins, with the exception of the Southwest Coast which is almost at 100% of average. Next week's rainfall is forecast to be near-normal and near-normal to below-normal for the second week.

Over the 7-day period from June 2 to June 8, 2015, approximately 5,100 ac-ft of Lake Okeechobee releases were sent south and treated by STA-1E, STA-2 and STA-3/4. Inflows into STA-1E and STA-2 made it to WCA-1 and WCA-2. STA-3/4 outflows went mainly to the Big Cypress Reservation (water supply), Holey Land, Rotenberger, NE and NW WCA-3A and hydration of STA-5/6. C-10A releases from the Lake were basically used for water supply in the L-8 basin, which also received water from the Lake via S-352, S-5A pump station and S-5AS. Of this water, no amount made it to tide via S-5AE S-155A and S-155.

2008 LORS Release Guidance (Part C): The Lake Okeechobee stage is within the Beneficial Use Sub-band and Part C of the 2008 LORS does not suggest releases to the WCAs to manage lake stages.

Consistent with the LORS release guidance, the USACE is requesting the SFWMD to discontinue maximum practicable Lake Okeechobee regulatory releases to the WCAs.

2008 LORS Release Guidance (Part D): The Lake Okeechobee stage is within the Beneficial Use Sub-band and Part D of the 2008 LORS does not suggest releases to the St. Lucie and Caloosahatchee Estuaries to manage lake stages.

The USACE started 7-day pulse releases averaging 650 cfs at S-79 and 0 cfs at S-80 on 0700 hours on June 5, 2015, ending at 0659 hours on June 12, 2015. The current release implementation is measured at S-79 for the Caloosahatchee Estuary and S-80 for the St. Lucie Estuary, requiring that the Lake Okeechobee releases (at S-77 and S-308) be reduced to account for any local runoff into the Caloosahatchee River (C-43) between S-77 and S-79 or the St. Lucie Canal (C-44) between S-308 and S-80. This accounting is performed on a daily basis. Over the past week, there were no flows through S-80, while flow at S-79 averaged 1,127 cfs with 693 cfs released from the lake through S-77.

SFWMD Lake scientists have reported that lake recession has accelerated due to lack of rain, low inflows, high ET and high water supply demand. The annual winter/spring recession in Lake stage continues and reduction in outflows is recommended to reduce current discharges as much as practicable to prolong the winter/spring recession without drying out the remaining available wading bird and snail kite foraging habitat.

For the Caloosahatchee Estuary, SFWMD estuary scientists reported salinity conditions are mostly within the preferred ranges for tape grass in the upper estuary and for oysters at the Cape Coral and Shell Point locations, but slightly above for the Sanibel location. Forecast salinity near the I-75 Bridge will increase without releases at S-79, however it is estimated that no freshwater inputs at S-79 will be needed to keep the 30-day moving average salinity below 5 psu for the next two weeks. For the St. Lucie Estuary, salinity at the US1 Bridge is within the preferred range for oysters.

SFWMD Lake Okeechobee Adaptive Protocol (AP) Release Guidance

This week the SFWMD's Lake Okeechobee Adaptive Protocol (AP) release guidance flowchart is applicable since the Lake Okeechobee stage is within the Beneficial Use Sub-band of the 2008 LORS. The Adaptive Protocols process is documented in the District publication Final Adaptive Protocols for Lake Okeechobee Operations (September 16th, 2010).

This week the Lake Okeechobee AP release guidance suggests no releases from Lake Okeechobee at S-77. This week's outcome is based on the current and forecasted salinity at the Val-I75 site being below the 5 psu threshold. The specific salinity criterion in the AP release guidance states "Estuary 'needs' water when the 30-day moving average salinity at I-75 bridge is projected to exceed 5 psu within 2 weeks." If the dry conditions continue and the 14-day salinity forecast shows the 30-day moving average staying below 5 psu, then the AP guidance will continue to suggest no releases at S-77.

For additional information pertaining to operations history and past recommendations, refer to the archives of LORS-2008 Release Guidance outcomes and operational position statements at www.sfwmd.gov under the Operational Planning topic.